

POSTER 3: Virome characterization of *Culex pipiens* in France through metagenomic analysis

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Culex pipiens is a mosquito vector of West Nile virus (WNV), the causing agent of West Nile fever. Epizooties of WNV have taken place in France, mainly in French Camargue, and in some instances human cases have been diagnosed. However, beyond WNV, little is known on the viruses associated to *Culex pipiens*, above all on viruses non-pathogenic for humans or livestock. Such viruses could have a role in WNV epidemiology either limiting mosquito populations or modulating the chances of WNV infection of *Culex pipiens*. Since the human impact of an ecosystem usually has an influence on species diversity, we can imagine a negative impact of human activity on the diversity of viral communities. Here we describe the development of an effective methodology for exploring viral diversity using high-throughput sequencing. We present the first results of the virome of *Culex pipiens* from sites with two different level of human activity in Camargue, showing that our approach allows to identify new viruses and, in some cases, to obtain almost full-length viral genomes.



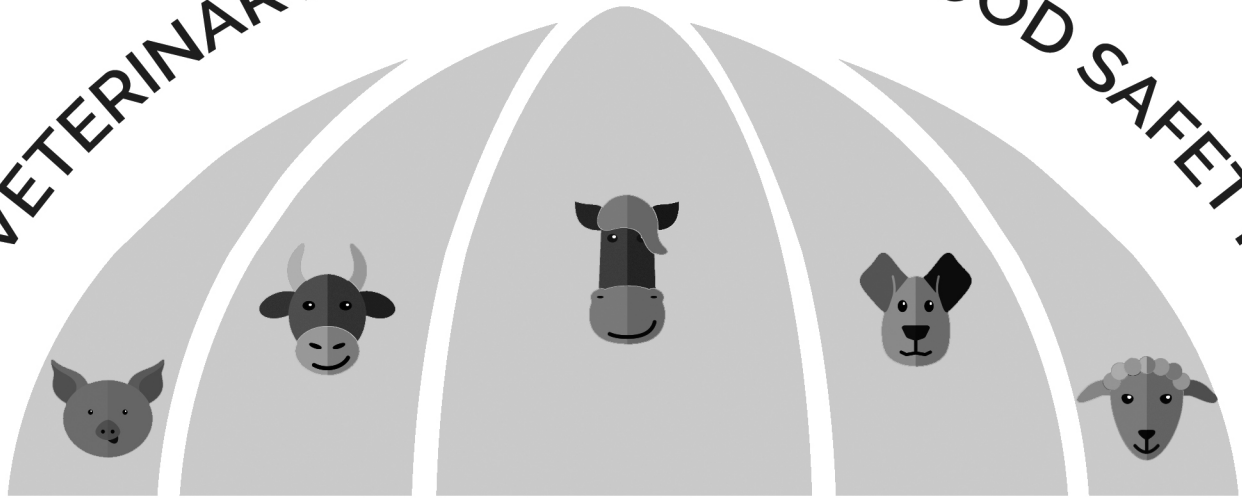
▶ PROGRAMME
& ABSTRACTS

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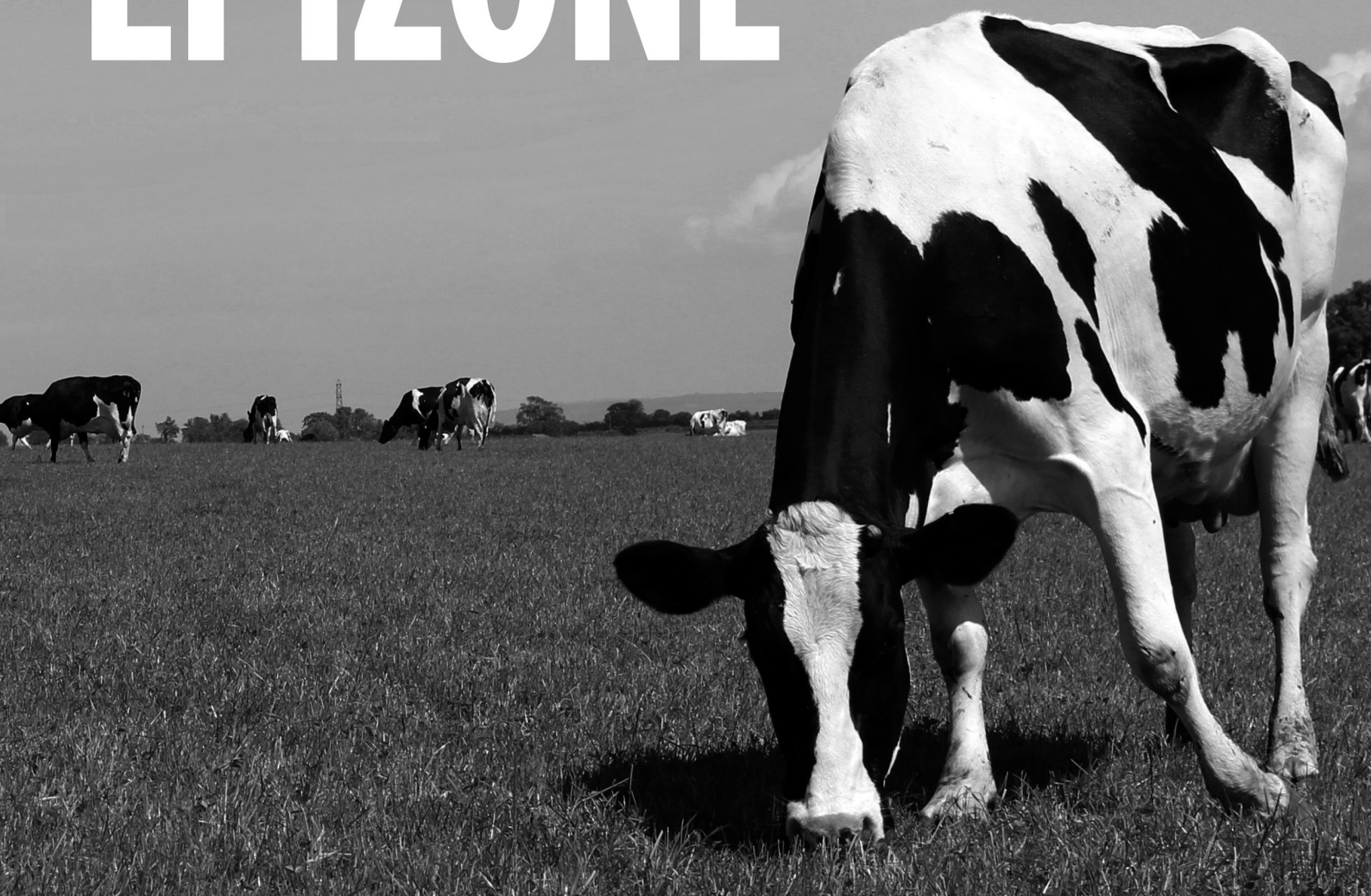
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Welcome 10th Annual Meeting EPIZONE “Going Viral”

It is a great honour and a privilege for me to give you all our warmest welcome to the Xth Annual Meeting of EPIZONE, the first to be celebrated in Spain. INIA-CISA, as the host institution, has been fully committed on this challenge from the beginning, and we do hope that the final result will be satisfactory for participants, sponsors and organizers. We wish to thank specially to them, as this event could not be possible without any of these essential parts. The financial support from sponsors, the availability and contributions from keynote speakers, the high scientific level of oral and poster presentations from participants and, at the end, curious, active and interested assistants, will contribute to the success of the meeting. From the organizing committee I want also to thank the EPIZONE secretariat and coordinator for their continuous help and implication in the effort. Finally, my gratitude to the people at the local and international scientific and organizing committees that have been working together very hard to yield a balanced, wide-scoped and intense (maybe too intense?) programme. Special thanks to Jovita Fernandez Piñero, who has been in charge of many tasks, and has fulfilled a brilliant labour. And will not forget about the enthusiastic Young Epizone people; thank you for your work and for organizing such a well-designed session.

Under the general title of “Going Viral”, and from a *One Health* perspective, we have outlined three concentric circles defining the main topics:

Topic I: Animal Health in a changing World, dealing with global threats for animal health.

Topic II: Threats at the European border, paying attention to diseases in the neighbouring areas.

Topic III: Current challenges inside Europe, where the main diseases affecting the European countries will be discussed.

As in previous EPIZONE meetings, diagnostics, intervention strategies, epidemiology and surveillance, risk analysis and some other aspects will be approached by recognized experts in specific sessions. Many diseases which are familiar to us will receive attention, from Foot and Mouth Disease to West Nile Virus Disease or the more recent episodes by Lumpy Skin Disease, Pest des Petits Ruminants and some others. African Swine Fever and Bluetongue have been the most “popular” diseases among contributors, this revealing their current relevance.

I hope that the efforts of contributors, sponsors, participants and organizers will provide an opportunity for the “epizootic community” to work together, to plan new initiatives, to interact and to share a good time in Madrid.

Victor Briones

Acknowledgements

We are very grateful to the following companies for sponsoring the 10th Annual EPIZONE meeting:

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